

AMENDMENTS TO THE CLAIMS:

Please amend claims 1 and 4 as set forth below. The claim listing below replaces all prior versions of the claims in the application.

1. (Currently Amended) A liquid discriminating apparatus comprising:

a concentration detecting device that calculates a concentration of a liquid reducing agent based on heat transfer characteristics between two positions spaced apart from each other in a storage tank that stores a liquid supplied to a nitrogen oxide reduction catalytic converter disposed in an engine exhaust system; and

a control unit that counts up a number of times ~~frequency at which~~ the concentration calculated by said concentration detecting device becomes equal to or less than 0% and discriminates a type of the liquid in said storage tank,

wherein said control unit discriminates that the liquid in said storage tank is water when the counted number of times ~~frequency~~ is greater than or equal to a predetermined frequency greater than 1, discriminates that the liquid in said storage tank is the liquid reducing agent when the concentration calculated by said concentration detecting device is more than 0% and equal to or less than a predetermined concentration, and discriminates that said storage tank is empty when the concentration calculated by said concentration detecting device is more than the predetermined concentration.

2. (Canceled)

3. (Previously Presented) The apparatus according to claim 1, further comprising a display device that visibly displays the discrimination result of said control unit.

4. (Currently Amended) A liquid discriminating method, comprising:

calculating a concentration of a liquid reducing agent based on heat transfer characteristics between two positions spaced apart from each other in a storage tank that stores a liquid supplied to a nitrogen oxide reduction catalytic converter disposed in an engine exhaust system;

counting up a number of times ~~frequency at which~~ the calculated concentration becomes equal to or less than 0%;

discriminating that the liquid in said storage tank is water when the counted number of times ~~frequency~~ is greater than or equal to a predetermined frequency greater than 1;

discriminating that the liquid in said storage tank is the liquid reducing agent when the calculated concentration is more than 0% and equal to or less than a predetermined concentration; and

discriminating that said storage tank is empty when the calculated concentration is more than the predetermined concentration.